

Bilingualism and its effects on the development of English phonology

A substantial proportion of the World's population is bilingual or multilingual. In the UK, the number of bilingual children appears to be rising, with 15.2% of children in primary schools in the UK speaking a language other than English at home, up 1% in 12 months*. This has implications for the identification of speech and language impairments as many of the assessment tools have been developed and tested on monolingual populations. Consequently there has been a history of both over and under diagnosis of speech and language impairments in bilingual populations.

To understand more about how speech develops when children are exposed to more than one language in their everyday lives, a review of the literature was conducted.

93 studies were identified and reviewed in depth: 6 investigated speech perception, 63 speech production and 24 pre-literacy skills. Nineteen of these studies investigated bilingual children with speech sound disorders, the rest investigated typically developing children. The studies were all very different in terms of their methodologies, the languages that they investigated and the exposure of children to one or both languages. Despite inconsistencies in study designs and language populations, some key findings emerged:

- Bilingual children produce atypical sounds in one or both languages
- Bilingual children show delayed acquisition of some sounds and accelerated acquisition of others, depending on interactions between languages spoken
- Bilingual children show greater variation in rates of speech acquisition compared to their monolingual children peers
- Some bilingual children show advanced acquisition of pre-literacy skills, mediated by characteristics of languages spoken
- Nonword repetition tasks are able to discriminate between bilingual children with and without language disorders

Findings from the review emphasise the importance of taking a careful case history and assessing speech sound production in both languages of a bilingual child. They also point towards the use of nonword repetition tasks to assist in the diagnosis of disorder in bilingual children.

As a consequence of this work, Dr Wren was invited to join the International Expert Panel on Multilingual Children's Speech, led by Professor Sharynne McLeod of Charles Sturt University, NSW, Australia and including members from across the globe. Following a meeting of the panel in Ireland in 2012, a position paper has been developed to provide guidelines for the provision of culturally competent services to multilingual children with speech sound disorders. This paper is available at:

<http://www.csu.edu.au/research/multilingual-speech/position-paper>.

In addition, a website with information for those working with children from multilingual was set up. This provides information on typical speech acquisition in children who are exposed to a multilingual environment as well as suggestions for assessments to use with different language populations. Further information is available at:

<http://www.csu.edu.au/research/multilingual-speech>

Publications:

Hambly, H., Wren, Y., McLoed, S. and Roulstone, S. (2013) The influence of bilingualism on speech production: A systematic review. *International Journal of Language and Communication Disorders*, 48, 1, 1-24. DOI [10.1111/j.1460-6984.2012.00178.x](https://doi.org/10.1111/j.1460-6984.2012.00178.x)

Wren, Y.E., Hambly, H. and Roulstone, S.E. (2013). A review of the impact of bilingualism on the development of phonemic awareness skills in children with typical speech development. *Child Language Teaching and Therapy*. 29, 1, 9-23. DOI: 10.1177/0265659012464880

*DCSF: *Schools, Pupils and Their Characteristics: January 2009*

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